

CLAIMS

[30990122 US]

A method of establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising the steps of:

monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;

'selecting first messages containing an identification related to an end user of said bearer data item and a first identification of a bearer channel carrying said bearer data item;

selecting second messages containing a second identification of a bearer channel carrying said bearer data item and a call identifier with system-wide significance;

selecting third messages containing an identification related to an end user of said data item and a call identifier with system-wide significance; and

using said selected third messages to establish a correlation between the first and second bearer channel identifications.

2. A method of establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising the steps of:

monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;

selecting first messages containing an identification related to an end user of said bearer data item and a first identification of a bearer channel carrying said bearer data item;

selecting second messages containing a second identification of a bearer channel carrying said bearer data item and a transaction identifier;

selecting third messages containing an identification related to an end user of said data item and packet network address information;

selecting fourth messages containing packet network address information and a transaction identifier; and

using said selected third and fourth messages to establish a correlation between the first and second bearer channel identifications.

- 3. The method of claim 2, wherein the fourth messages comprise responses to said second messages.
- 4. The method of claim 1, wherein the first messages are SS7 ISUP Initial Address Messages, the end user identification comprises calling and called party addresses, and the first bearer channel identification comprises an OPC-DPC-CIC combination.

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- 5. The method of claim 1, wherein the second messages are MGCP Create Connection messages and the second bearer channel identification comprises endpoint identifier parameters.
- 6. The method of claim 1, wherein the third messages are ISUP Initial Address Messages and the end user identification comprises calling and called party addresses.
- 7. The method of claim 2, wherein the fourth messages are MGCP Response messages, the packet network address information comprises an SDP connection descriptor parameter, and the transaction identifiers comprise transaction ID parameters.
 - 8. A method of establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising the steps of:

monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;

selecting first call initiation messages containing a first identification of a bearer channel carrying said bearer data item;

selecting second call initiation messages containing a second identification of a bearer channel carrying said bearer data item;

determining elapsed time between occurrence of said first and second messages; and establishing a correlation between first and second messages for which the elapsed time is below a predetermined threshold, and thus between the first and second bearer channel identifications.

- 9. The method of claim 8, wherein establishment of a correlation between first and second messages is also dependent upon absence of any similar messages within a predetermined time interval.
- 10. The method of claim 8, wherein the first messages are SS7 ISUP Initial Address Messages, the end user identification comprises calling and called party addresses, and the first bearer channel identification comprises an OPC-DPC-CIO combination.
- 35 11. The method of claim 8, wherein the second messages are MGCP Create Connection messages and the second bearer channel identification comprises endpoint identifier parameters.

12. Apparatus for establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising:

monitoring equipment for monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;

a first selector for selecting first messages containing an identification related to an end user of said bearer data item and a first identification of a bearer channel carrying said bearer data item;

a second selector for selecting second messages containing a second identification of a bearer channel carrying said bearer data item and a call identifier with system-wide significance;

a third selector for selecting third messages containing an identification related to an end user of said data item and a call identifier with system-wide significance; and

a correlator for establishing a correlation between the first and second bearer channel identifications in accordance with said selected third messages.

13. Apparatus for establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising:

monitoring equipment for monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;

a first selector for selecting first messages containing an identification related to an end user of said bearer data item and a first identification of a bearer channel carrying said bearer data item;

a second selector for selecting second messages containing a second identification of a bearer channel carrying said bearer data item and a transaction identifier;

a third selector for selecting third messages containing an identification related to an end user of said data item and packet network address information;

a fourth selector for selecting fourth messages containing packet network address information and a transaction identifier; and

a correlator for establishing a correlation between the first and second bearer channel identifications in accordance with said selected third and fourth messages.

- 14. Apparatus for establishing a correlation between the contents of signalling messages conforming to different protocols but relating to a common bearer data item, comprising:
- a monitor for monitoring messages traversing at least first and second signalling channels which conform to respective first and second signalling protocols;
 - a first selector for selecting first call initiation messages containing a first

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identification of a bearer channel carrying said bearer data item;

a second selector for selecting second call initiation messages containing a second identification of a bearer channel carrying said bearer data item;

a monitor for determining elapsed time between occurrence of said first and second messages; and

a correlator for establishing a correlation between first and second messages for which the elapsed time is below a predetermined threshold, and thus between the first and second bearer channel identifications.

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